

Acoustics Research

B R I G H A M Y O U N G U N I V E R S I T Y

CENTER

This new Center is focused on commercializing active sound control technology with superior ability to both reduce noise in varied settings such as vehicle cabins, computer fans and telecommunications and to modify sounds for commercial benefit, such as enhanced home theater acoustics.

TECHNOLOGY

The Center is developing several technologies aimed at improving noise control, including: active noise control in vehicle cabins, active noise cancellation of high speed fans, the application of energy density sensors to simplify sound control in complex environments, sound quality analysis. This group of technologies is known as noise-cancellation because, in its simplest form, it makes use of a speaker which produces a sound that opposes the noise one is attempting to eliminate, thereby “canceling” the noise.

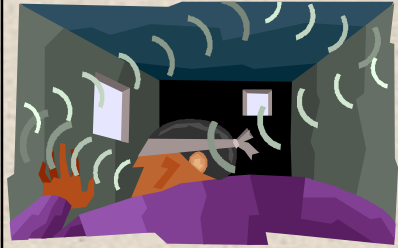
For this first year, the Center focused its active noise control technology on the application of noise in small aircraft, including helicopters. Early results with helicopter noise show a possible attenuation level of 9dB. With increasing noise regulations, this area of research looks to have great potential.

ACCOMPLISHMENTS

Sound field equalization technology has already generated interest from a Japanese audio company which has led to discussion of a possible Utah spinout that will manufacture the technology. This technology has a variety of applications in the pro-audio market in which sound qualities of an auditorium or recording studio can be more effectively equalized.

In its first year, the Center has been awarded \$99,863 in private funding and \$137,513 in federal funding. The Center has also worked on securing its intellectual property position and has three patent applications that will be filed next year..

THINK TANK



What if there was...

A way to reduce the noise inside an aircraft or the sound of a computer fan or automatically equalize the speakers in your home theater system?

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